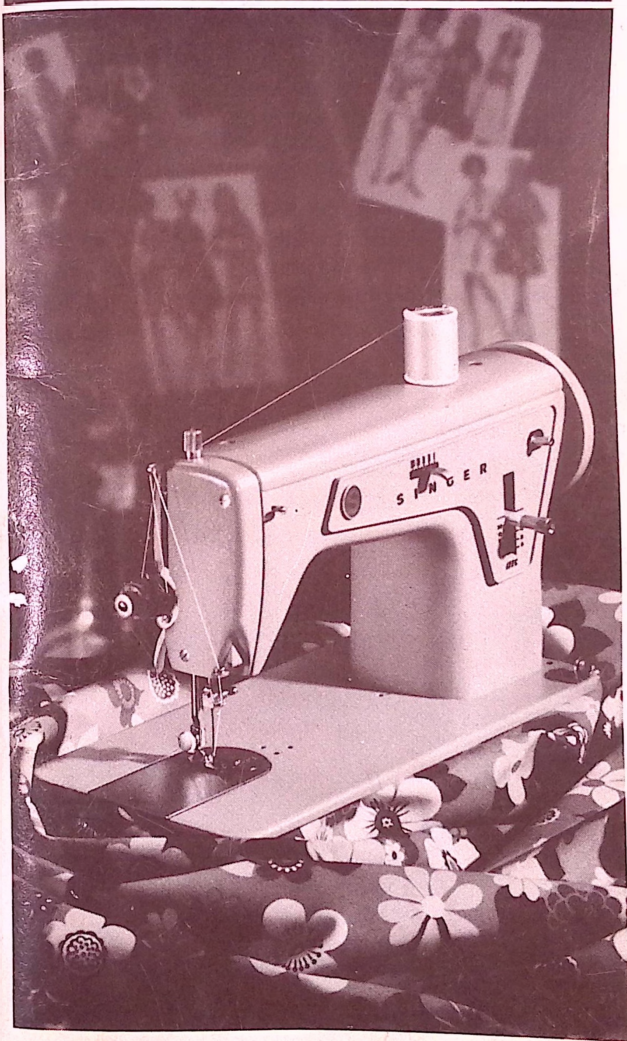


Instructions **SINGER**

Zig-Zag Sewing Machine
Model 177



enjoy carefree sewing!

Congratulations . . .

You are about to discover the wonderful pleasure of sewing with your new SINGER sewing machine. We know you are eager to get started on a sewing project . . . but we urge you to become familiar with this book before you begin. It is designed to help you get the benefit of all the capabilities of this machine. Especially, we recommend that you keep the following points in mind:

DO choose the correct needle and thread for your fabric — if either is the wrong size or type, you may encounter broken or knotted thread, or faulty stitching. The Fabric, Thread and Needle Table on page 9 will help you make a perfect choice.

DON'T sew with a bent or blunt needle. If the needle is damaged — or improperly inserted in the machine — it can cause skipped stitches. See page 8 for instructions.

DO follow the instructions on page 16 for threading the machine. Note particularly the directions for threading the tension discs.

DON'T forget to hold the bobbin properly when you thread the bobbin case. Page 14 tells you how to do this correctly.

DO become familiar with the instructions for regulating stitch length (page 22), presser-foot pressure (page 22), and thread tension (page 24). Take advantage of the capability of your sewing machine!

DON'T allow lint or thread ends to accumulate in the lower thread area — they can cause jamming or excessive noise. Clean and lubricate machine regularly, as instructed on page 52.

DO remember that expert, dependable SINGER Service is always available. If your sewing machine should require maintenance or repair, be sure to call your Singer Sewing Center or Authorized Singer Dealer. You will find the number listed under "Singer Company" in your telephone book.

Above all, *do* enjoy sewing!

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Contents

	Page
1. Getting to Know Your Machine	4
Principal Parts.	4, 5
2. Getting Ready to Sew	6
Preliminary Steps.	6
Choosing Needle and Thread.	8
Threading the Machine.	10
The Bobbin Thread.	10
The Needle Thread.	16
3. Straight Stitching	20
Preparation.	20
Starting to Sew.	20
Adjusting Selectors for Your Fabric.	22
Sewing a Seam.	26
4. Zig-Zag Stitching	32
Adjusting Selectors.	32
Adjusting Needle-Thread Tension.	34
Adjusting Presser-Foot Pressure.	34
5. Sewing the Professional Way	36
Construction Details.	36
Lingerie Seams.	36
Seams in Knit Fabrics.	36
Flat-Felled Seams.	38
Seam Finishes.	38
Darts.	40
Buttonholes.	42
Keeping Up Appearances.	48
Mending.	48
Blanket Binding.	50
Darning.	50
6. Caring for Your Machine	52
Cleaning and Lubricating.	52
Adjusting Motor Belt Tension.	58
Replacing Slide Plate.	58
Removing Machine from Cabinet.	60
7. Fashion* Aids	62
Index.	63

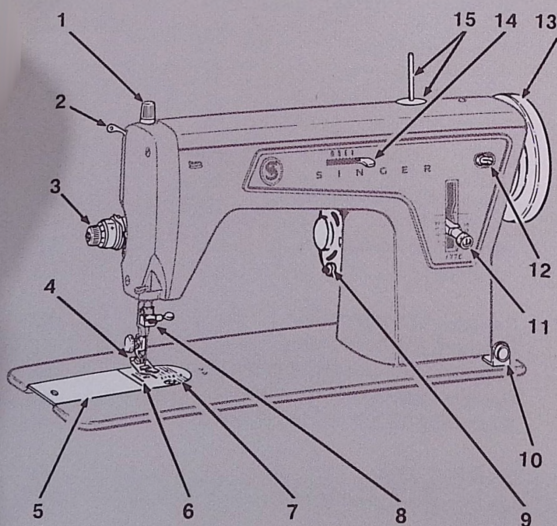
1. Getting to Know Your Machine

principal parts and what they do

1. **Pressure Regulating Thumb Screw** regulates presser-foot pressure on the fabric.
2. **Take-up Lever** controls flow of needle thread.
3. **Needle-Thread Tension Dial** lets you select the right tension for your fabric, stitch, and thread. The numbers eliminate guesswork in duplicating settings.

To increase tension, turn dial to higher number.

To decrease tension, turn dial to lower number.



4. **Presser Foot** holds fabric against feed. Presser-foot lifter at rear of machine (not shown) raises and lowers the presser foot.
5. **Slide Plate** opens easily, provides access to bobbin case latch for removal and replacement of the bobbin.
6. **Feed** moves fabric under the presser foot.
7. **Needle Plate** provides working surface around the needle. Guidelines on plate help you keep seams straight.
8. **Needle Clamp** holds needle and is designed to eliminate the possibility of inserting the needle backwards.
9. **Electric Motor** supplies power to machine through a belt to the hand wheel. Motor is activated by a speed controller.
10. **Bobbin-Winder Tension Discs** regulate thread tension for winding bobbins.
11. **Stitch Length Selector** allows you to choose from a variety of stitch lengths, including fine adjustments for close zig-zag stitching. Raising the lever permits reverse stitching.
12. **Bobbin Winder Spindle** lets you wind the bobbin quickly and easily.
13. **Hand Wheel** controls movement of take-up lever and needle. *Always turn it toward you.*
14. **Stitch Width Selector** controls the width of zig-zag stitching and positions the needle for straight stitching.
15. **Spool Pin and Felt.** Pin holds thread spools of various sizes. Felt helps thread unwind smoothly.

2. Getting Ready to Sew

preliminary steps

CONNECTING MACHINE

Before plugging in your machine, be sure that the electrical information on the motor bracket conforms to your electrical power supply.

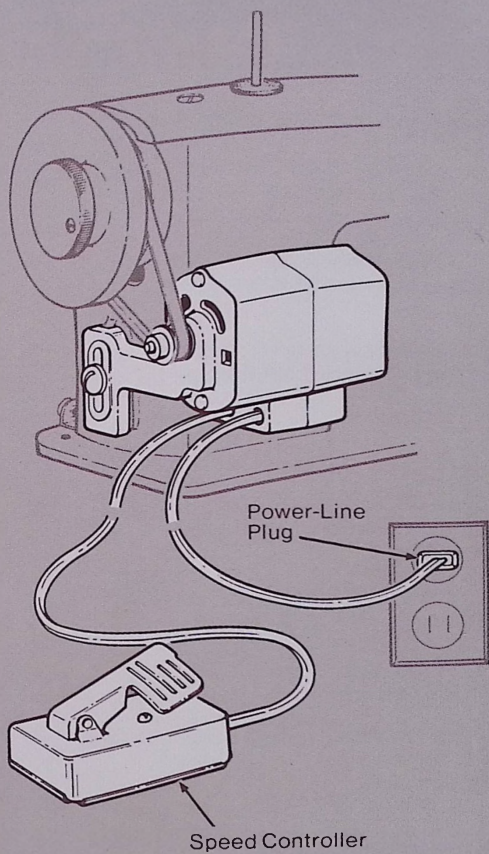
To connect the machine, insert the power-line plug into your electrical outlet.

OPERATING MACHINE AND CONTROLLER

The speed controller controls the speed of the machine.

To run the machine, press the speed controller. The harder you press, the faster the machine will sew.

CAUTION: *We recommend that you unplug your machine from the electrical outlet before changing needles, removing presser foot or needle plate and when leaving the machine unattended. This eliminates the possibility of starting the machine by accidentally pressing the speed controller.*



Electrical Connections

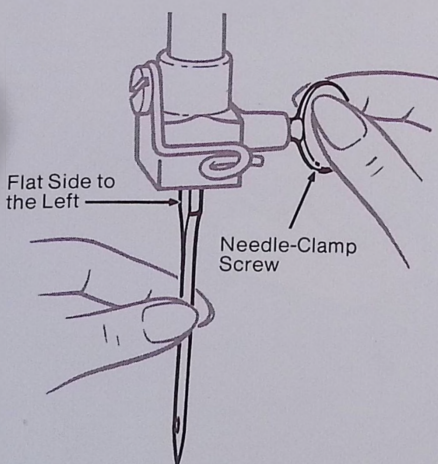
choosing needle and thread

The needle and thread you choose will depend upon the fabric being stitched. The table on the following page is a practical guide to thread and needle selection. Refer to it before starting a sewing project. Be sure to use the same size thread in both the needle and bobbin.

CHANGING THE NEEDLE

The needle clamp has been designed so that the needle can only be inserted with the flat side of the shank toward the left.

1. Raise needle bar to its highest position, loosen needle-clamp screw, and remove needle.
2. Insert new needle in clamp, with flat side to the left, and push it up as far as it will go.
3. Tighten needle-clamp screw.



Changing the Needle

FABRIC, THREAD AND NEEDLE TABLE

Fabric	Thread	Needles	
		Type	Size
Delicate — tulle, chiffon, fine lace, organza	Fine mercerized cotton Fine synthetic thread	Style 2020 (15x1)	9
Lightweight — batiste, organdy, jersey, voile, taffeta, crepe, chiffon velvet, plastic film	50 mercerized cotton "A" Silk Synthetic thread Polyester core/cotton	Style 2020 (15x1)	11
Medium Weight — gingham, percale, pique, linen, chintz, faille, satin, fine corduroy, velvet, suitings, knits, deep-pile fabrics, vinyl	50 mercerized cotton 60 cotton "A" Silk Synthetic thread Polyester core/cotton	Style 2020 (15x1)	14
Medium Heavy — gabardine, tweed, sail-cloth, denim, coatings, drapery fabrics, vinyl, deep-pile fabrics	Heavy-duty mercerized cotton 40 to 60 cotton Synthetic thread	Style 2020 (15x1)	16
Heavy — overcoatings, dungaree, upholstery fabrics, canvas	Heavy-duty mercerized cotton 24 to 40 cotton Synthetic thread	Style 2020 (15x1)	18
All Weights — decorative top stitching	"D" Silk† (Buttonhole twist)	Style 2020 (15x1)	18

†Use with 50 mercerized cotton or "A" silk in bobbin.

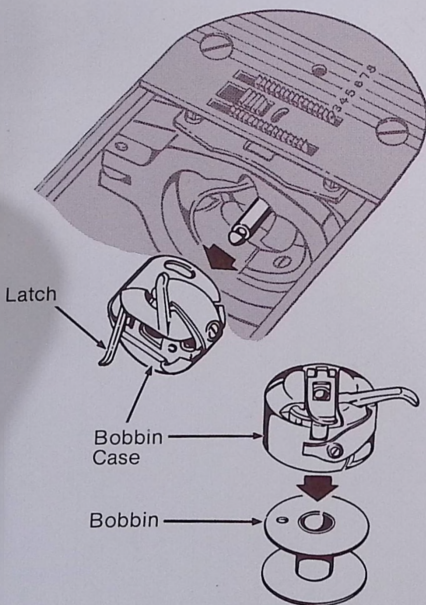
threading the machine

THE BOBBIN THREAD

Winding the Bobbin

Removing bobbin case

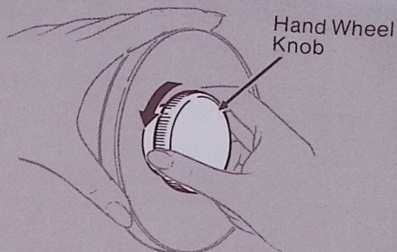
1. Raise the presser foot and turn hand wheel toward you until needle is at its highest position.
2. Open the slide plate.
3. Reach down with your left hand and open the bobbin case latch.
4. Withdraw bobbin case from machine.
5. Release the latch and bobbin will drop from bobbin case.



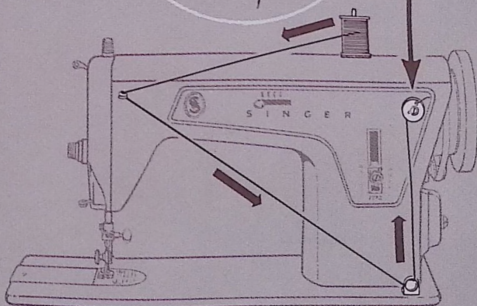
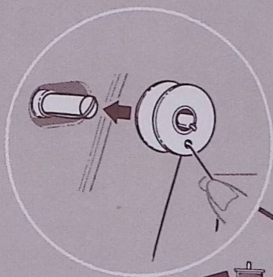
Removing Bobbin Case

Winding steps

1. Hold hand wheel with left hand and loosen hand wheel knob by turning it toward you.
2. Place spool of thread on spool pin over the felt. Pass thread from spool through thread guide, between bobbin-winder tension discs and through hole in bobbin (from inside out).



Step 1



Step 2

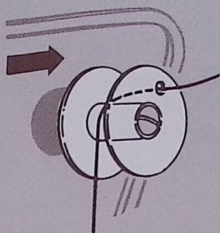
Winding Steps

Winding steps (continued)

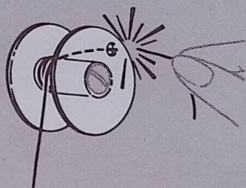
3. Place bobbin on spindle and slide bobbin and spindle to the right.
4. Hold thread end and start the machine. (Thread end will break off after a few coils have been wound.)
5. When bobbin is slightly less than full, stop the machine and slide bobbin and spindle to the left. Cut thread about four inches from the bobbin and remove bobbin from spindle.
6. Hold the hand wheel from turning and tighten hand wheel knob.

The bobbin-winding tension has been pre-set at the factory and should need no adjusting. However, if adjustment is required, loosen the screw that holds the bobbin-winder tension bracket to the machine and slide the bracket forward if bobbin winds high to the rear; slide bracket back if bobbin winds high to the front.

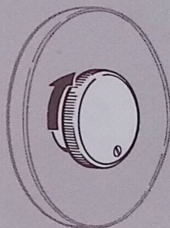
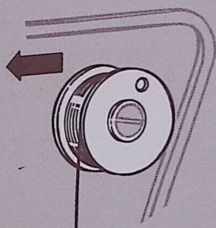
Winding Steps (continued)



Step 3

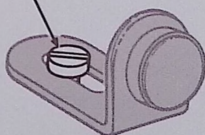


Step 4



Steps 5 and 6

Bracket
Screw



Bobbin-Winding Tension Discs

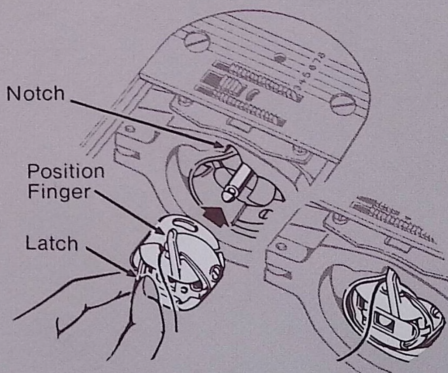
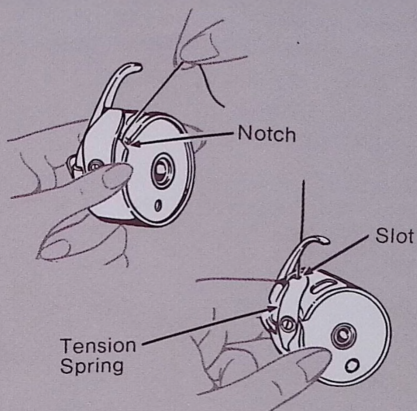
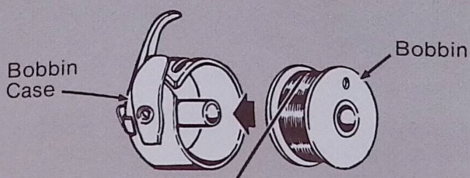
Threading bobbin case

1. Hold the bobbin so that the thread will unwind in the direction shown.
2. Place bobbin into the bobbin case.
3. Pull thread into notch, under the tension spring and into the slot at the end of the tension spring. Allow about three or four inches of thread to hang from the bobbin case.

Replacing bobbin case

1. Raise needle to its highest position.
2. Hold bobbin case by latch and place it on the stud of the shuttle allowing position finger to enter notch at top of shuttle body.
3. Release latch and press bobbin case in until it clicks into place. Then close slide plate.

Threading Bobbin Case

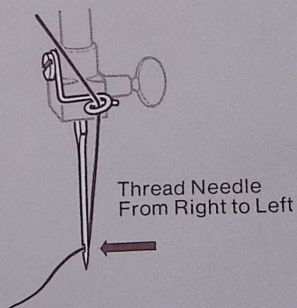
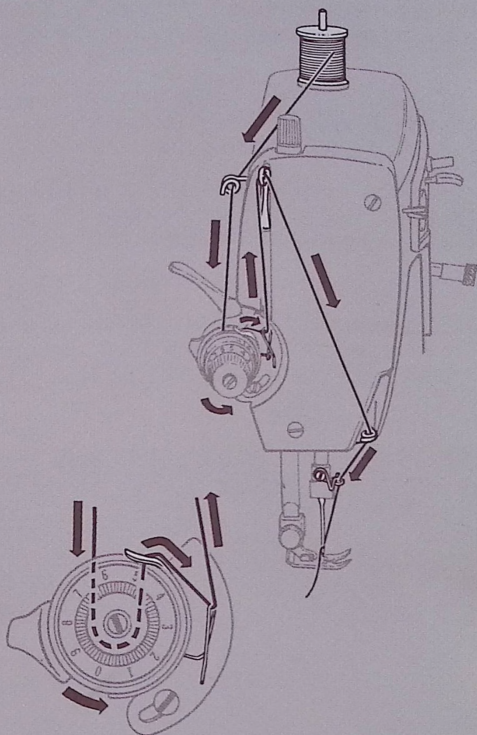


Replacing Bobbin Case

THE NEEDLE THREAD

1. Turn hand wheel toward you to raise needle to its highest position.
2. Raise the presser foot.
3. Place spool of thread on the spool pin over the spool pin felt.
4. Lead thread from spool through upper thread guide, down around and between tension discs, over tension thread guide, under spring and up through eyelet in take-up lever.
5. Continue to lead thread through all other threading points shown.
6. Thread the needle from *right* to *left* drawing about four inches of thread through eye of needle.

Threading the Needle

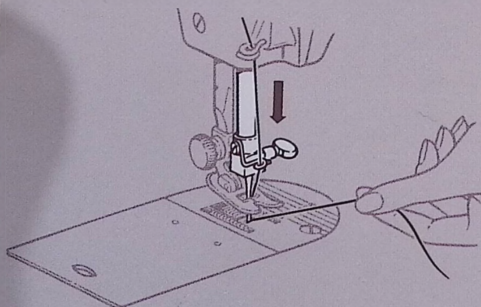


RAISING THE BOBBIN THREAD

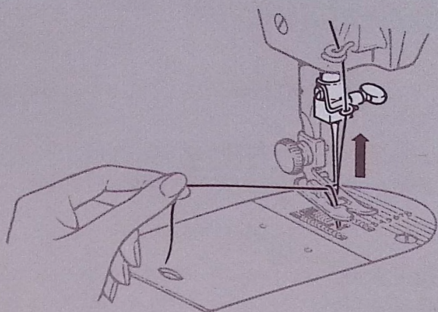
Now that you have wound the bobbin and threaded the needle, you will need to raise the bobbin thread through the hole in the needle plate.

1. Hold needle thread lightly with left hand and turn hand wheel slowly toward you so that needle enters needle plate.
2. Continue turning hand wheel and holding needle thread until needle rises and brings up bobbin thread in a loop.
3. Undo the loop with your fingers.
4. Place both needle and bobbin threads under the presser foot, and draw them diagonally to the back of the machine.

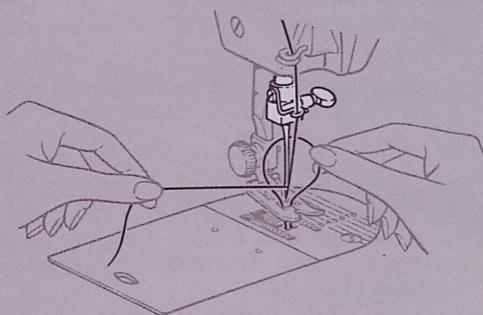
Raising Bobbin Thread



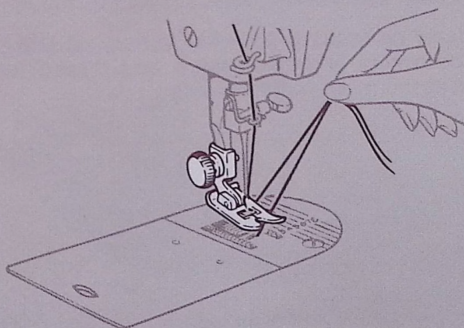
Step 1



Step 2



Step 3



Step 4

3. Straight Stitching

preparation

Before moving the stitch width selector, make sure the needle is above the needle plate.

SETTING THE MACHINE

1. Press down on stitch width selector lever and slide lever to right until groove in lever is directly under the straight-stitch symbol | (setting **0**).

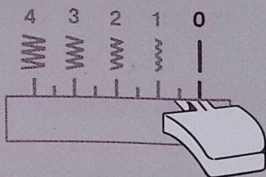
For your convenience, the position numbers **0,1,2,3,4** will be used throughout this book when the instructions require stitch width settings.

2. Set stitch length selector for desired stitch length. (See page 22 for instructions.)

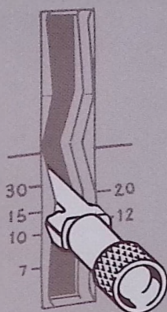
starting to sew

1. Place needle and bobbin threads under presser foot and draw them diagonally to the back of machine.
2. Position the needle in the fabric where desired for stitching start.
3. Lower the presser foot and start the machine.

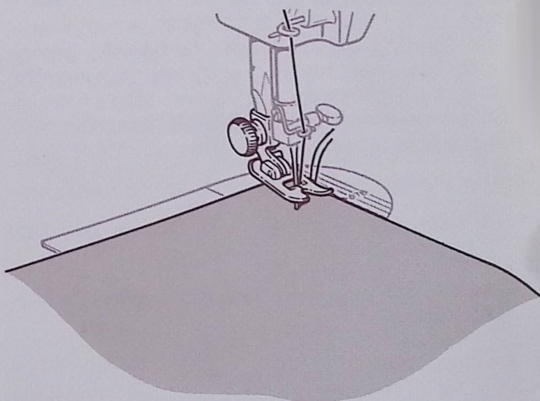
To sew perfectly on a wide variety of fabrics adjust stitch length, pressure and thread tension as instructed on following pages.



**Stitch Width Selector
Set for Straight Stitching**



Stitch Length Selector



Starting to Sew

adjusting selectors for your fabric

SETTING STITCH LENGTH

The stitch length selector regulates the length of both straight and zig-zag stitches. The numbers at the right and left of the lever represent the number of stitches per inch: *the higher the number, the shorter the stitch*. Generally, shorter stitches are best for lightweight fabric; longer ones for heavy fabric.

Setting Selector

1. Loosen thumb nut by turning to left.
2. Position lever for desired stitch length.
3. Tighten thumb nut by turning to right.

For reverse stitching, simply raise the selector lever as far as it will go. Do not loosen thumb nut to reverse.

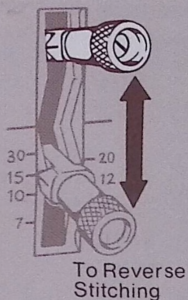
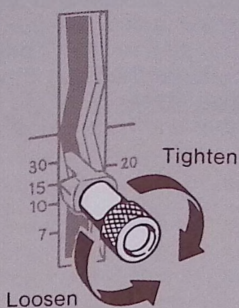
REGULATING PRESSURE

The pressure screw regulates the pressure that the presser foot exerts on the fabric. Correct pressure is important to ensure smooth and even feeding of the fabric. Generally, heavy fabric requires heavy pressure; lightweight fabric, light pressure. But fabric texture must also be considered. Soft fabrics, for example, require less pressure than crisp fabrics.

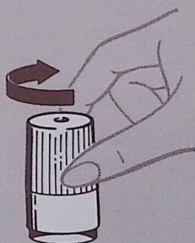
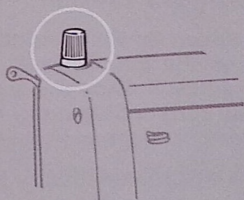
Lower the presser foot before setting pressure.

- **To decrease pressure**, turn screw upward (counterclockwise).
- **To increase pressure**, turn screw downward (clockwise).

Setting Stitch Length



Regulating Pressure



To Decrease

To Increase

REGULATING THREAD TENSION

Correct tension is important because too much or too little will weaken your seams or cause the fabric to pucker. Make a test sample with the fabric and thread you plan to use. A perfect stitch will have the needle and bobbin threads locked between the two layers of fabric with no loops on top or bottom and no puckers.

Needle-Thread Tension

The tension dial regulates the degree of tension on your needle thread. Set it according to the type of thread and fabric you use. The numbers on the dial eliminate guesswork in duplicating settings.

If the stitches in your sample look loose, increase needle-thread tension. If the fabric puckers, decrease tension.

- **To increase tension**, turn dial to a higher number.
- **To decrease tension**, turn dial to a lower number.

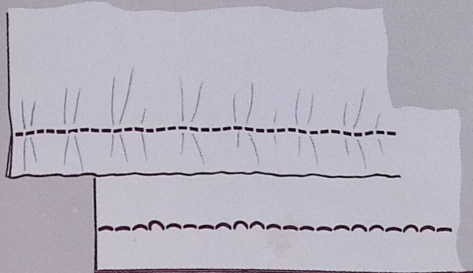
Bobbin-Thread Tension

Bobbin-thread tension is controlled by a screw located on the bobbin case. You will seldom need to adjust it since it is usually possible to obtain the correct balance by adjusting needle-thread tension alone.

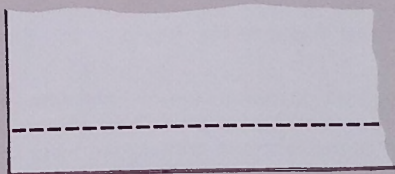
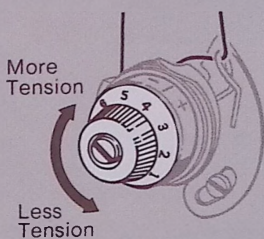
Should it become necessary to adjust bobbin-thread tension, use the small screwdriver that comes with your machine. A very slight turn will produce a noticeable change in bobbin-thread tension.

- **To increase tension**, turn screw clockwise.
- **To decrease tension**, turn screw counter-clockwise.

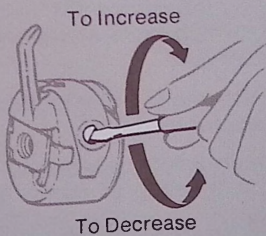
Needle-Thread Tension



Incorrect

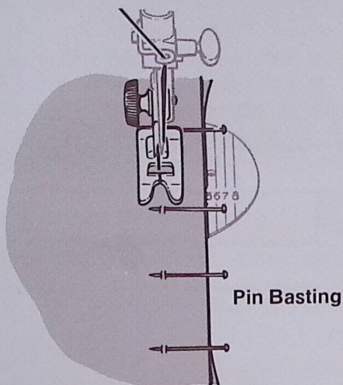


Correct



Bobbin-Thread Tension

sewing a seam



PIN BASTING

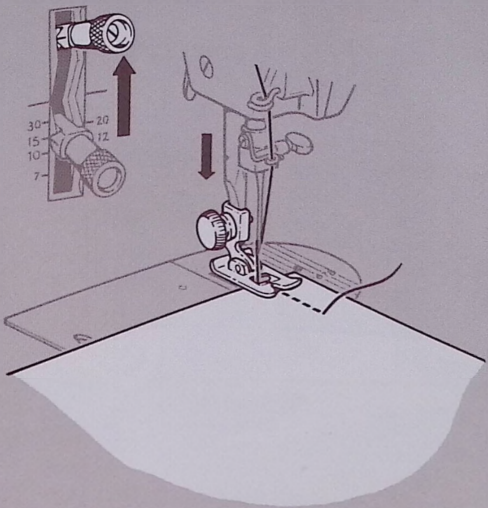
Pin basting is a time-saver and can be used in place of hand basting when you are straight stitching seams in easy-to-handle fabric.

Use fine pins and place them so that:

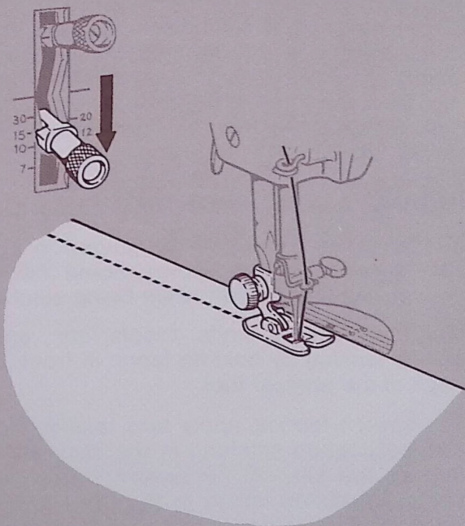
- They are at right angles to the presser foot and just nip into the fabric at the stitching line.
- They do not extend under both sides of the presser foot. *Never place pins on the underside of the fabric in contact with the feed.*

STARTING A SEAM

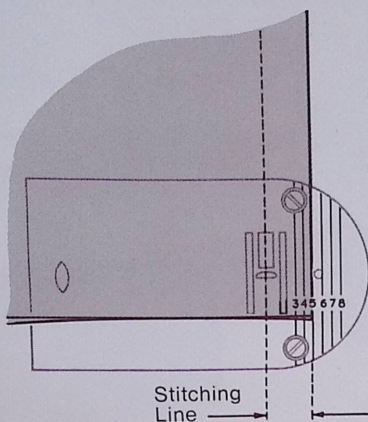
1. With presser foot raised, turn hand wheel toward you to position the needle in fabric about 1/2 inch from starting edge. Lower the presser foot.
2. Set stitch length selector for desired number of stitches per inch.
3. Raise stitch length selector to reverse and backstitch to edge of fabric for reinforcement.
4. Lower stitch length selector for forward stitching and stitch.



Starting a Seam



Stitching a Seam



Keeping Seams Straight

KEEPING SEAMS STRAIGHT

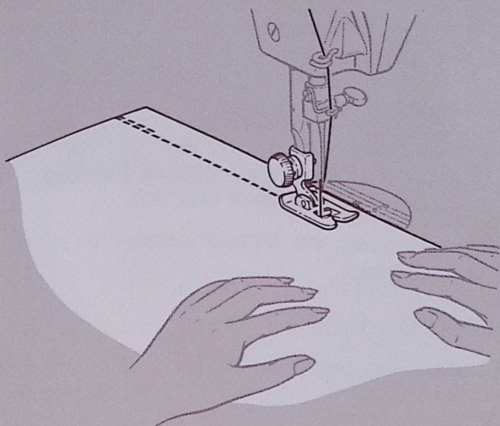
To keep the seam straight, use one of the numbered guidelines on the needle plate. The numbers indicate distance, in eighths of an inch, from the needle. If you want a $\frac{5}{8}$ -inch seam, for example, line up your fabric with the number 5 guideline.

GUIDING AND SUPPORTING FABRIC

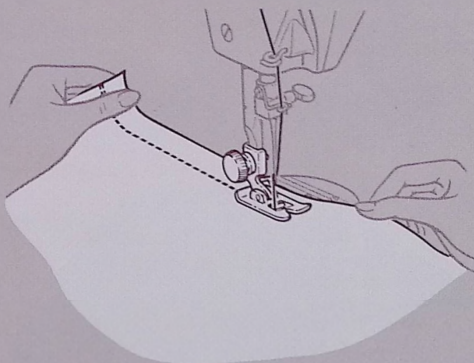
Most fabrics need only to be guided in front of the presser foot as shown. Some fabrics, however, require support while being stitched:

- For filmy sheers, knits, tricots, etc., apply *gentle* tension by holding fabric in front and back of the presser foot.
- For stretch fabrics, apply *firm* tension front and back when stitching in the same direction as the stretch. For seams not on the stretch direction, stitch in the conventional manner, guiding fabric in front of the presser foot.

Guiding and Supporting Fabric



Guiding Fabric



Supporting Fabric

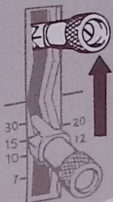
REINFORCING END OF SEAM

1. Stitch to the edge of the fabric.
2. Raise stitch length selector as far as it will go and backstitch to reinforce end of seam. Then lower stitch length selector for forward stitching.
3. Raise needle to its highest position, raise the presser foot, and remove the fabric by drawing it to the back and left.
4. Cut threads on thread cutter at rear of presser bar.

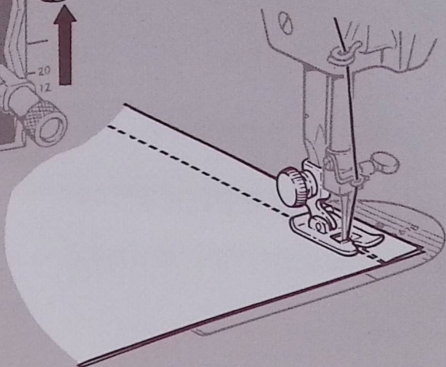
CURVED SEAMS

When sewing armhole and neckline seams, you usually will be sewing on a curve. To do this, follow the same procedure as for sewing a straight seam *except*:

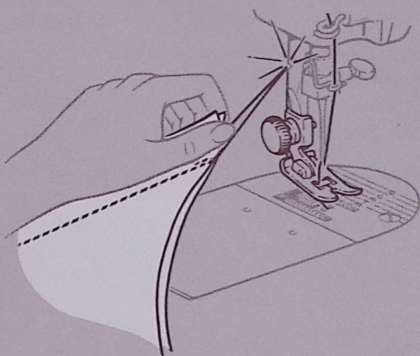
- Use a short stitch length for elasticity and strength. For example, if you use 12 stitches to the inch for straight seams, select 15 to 20 per inch for curved seams in the same fabric.



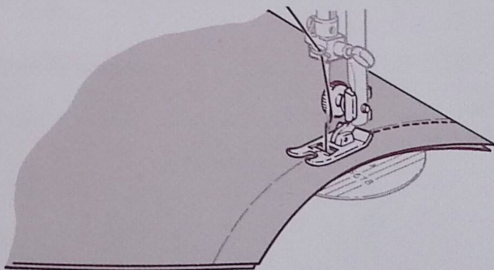
Ending a Seam



Reinforcing End of Seam



Cutting Threads



Sewing a Curved Seam



4. Zig-Zag Stitching

You will find the zig-zag stitch that is built into your machine ideal for many of your sewing applications. To use this stitch, simply follow the instructions below and on following pages.

adjusting selectors

ADJUSTING STITCH WIDTH

Before moving selector, make sure the needle is above fabric.

To produce a zig-zag pattern, depress and slide stitch width selector lever to any zig-zag setting between  (narrow-position 1) and  (wide-position 4).

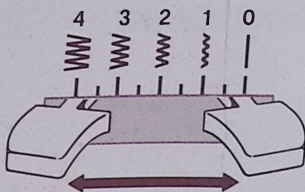
For your convenience, the position numbers 0, 1, 2, 3, 4 will be used throughout this book when instructions require stitch width settings.

ADJUSTING STITCH LENGTH

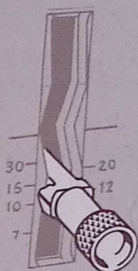
For open zig-zag stitching, choose any stitch length from 6 to 30, depending on how open you wish the stitching to be. If you wish a closely spaced zig-zag stitch:

1. Move stitch length selector to 30.
2. Run the machine at slow speed and gradually tighten thumb nut by turning it clockwise, until stitches are closely spaced and form a smooth surface.

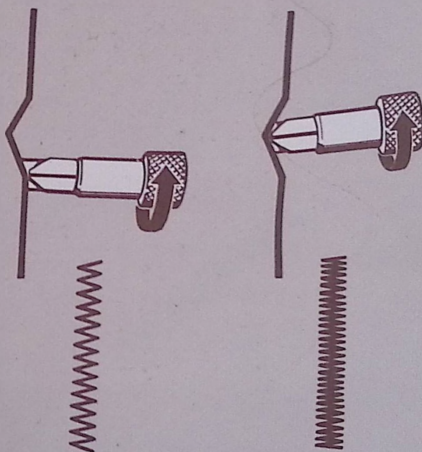
NOTE: For best results in producing a smooth, satiny surface, use the special-purpose foot which is available at your local Singer Sewing Center (see page 62).



Adjusting Stitch Width



Adjusting Stitch Length



**As Selector is Raised,
Stitches Close Up**

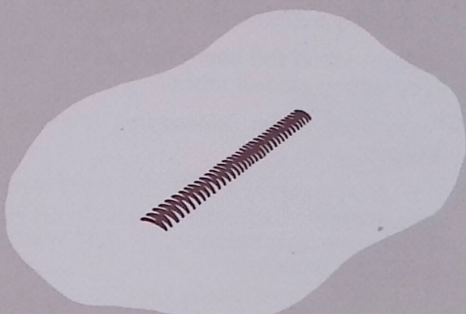
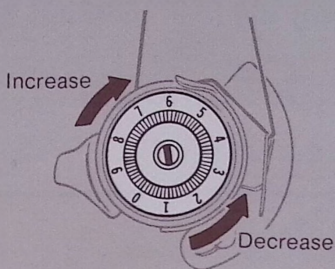
adjusting needle-thread tension

Zig-zag stitching requires less needle-thread tension than straight stitching; and closed zig-zag stitching requires even less tension than open zig-zag stitching. Furthermore, the wider the stitch, the lighter the tension on the thread must be. Thus, stitch width 4 requires the least tension; narrower stitching requires more.

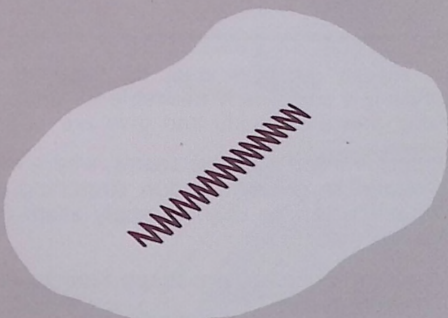
Make a test sample with the fabric and thread you plan to use and notice the stitching. If the stitching looks too taut, or if the fabric is puckering, lower the needle-thread tension by turning the tension dial to a lower number.

adjusting presser-foot pressure

Turn to page 22 under "Straight Stitching" for instructions on adjusting pressure.



Too Tight



Correct

Adjusting Needle-Thread Tension

5. Sewing the Professional Way

construction details

LINGERIE SEAMS

- Stitch Width: 2 to 3
 - Stitch length: 15 to 20, depending on fabric
-

To make seams in lingerie both durable and flexible, use the zig-zag stitch. This treatment is particularly suitable for bias seams.

1. Straight-stitch the seam (with stitch width at 0) on wrong side of fabric.
2. Press both seam allowances in the same direction.
3. Set stitch width at 2 or 3 and, from the right side, top stitch with zig-zag stitching, letting the needle alternately enter the seam line and seam thickness.

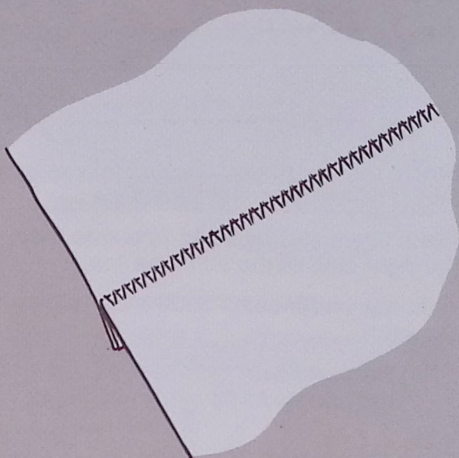
SEAMS IN KNIT FABRICS

- Stitch Width: 1 to 2
 - Stitch Length: About 20
-

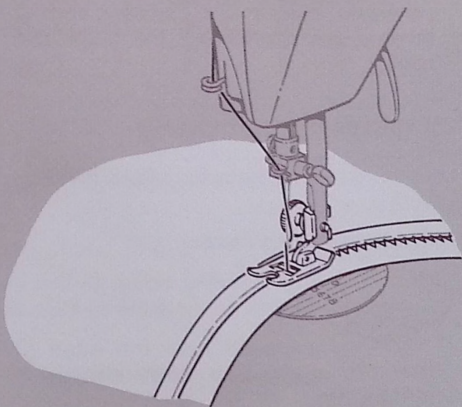
The zig-zag stitch is ideal for seaming knit fabrics. It is particularly desirable for underarm seams where elasticity and give are needed.

For neckline and waistline seams, where a stay is needed to prevent undue stretching, this same stitch can be used to apply seam tape. For a flat, smooth finish:

1. If seam is curved, pre-shape tape to fit by steam pressing.
2. Baste tape in place.
3. Stitch, allowing needle to alternatively enter the seam tape and seam allowance.



Lingerie Seams



Seams in Knit Fabrics

FLAT-FELLED SEAMS

- Stitch Width: 2
 - Stitch Length: 15 to 20, depending on fabric
-

Zig-zag stitching gives strength and durability to flat-felled seams.

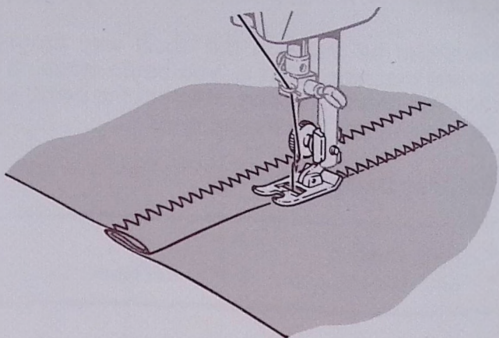
1. Stitch the seam on the right side of the fabric, taking full seam allowance.
2. Press seam allowance to one side, keeping the right side of the stitch on top.
3. Trim the under-seam allowance to one-half its width.
4. Turn the upper-seam allowance edge evenly over the trimmed edge and top stitch.

SEAM FINISHES

- Stitch Width: 3 or 4
 - Stitch Length: 8 to 20, depending on fabric
-

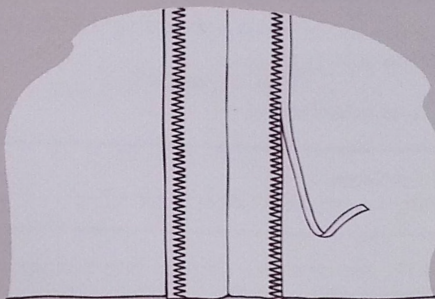
Seam edges support the garment and should be given a durable finish if the fabric is likely to ravel.

1. Adjust stitch width and stitch length settings to suit the fabric. Choose the settings that will give you the most "open" stitch that will secure the fabric edges; avoid harsh, over-stitched edges.
2. Trim seam edges evenly.
3. Place stitching *near* the edge of the seam allowance or *over* the raw edge as illustrated.
4. If stitching is placed *near* the edge of the seam allowance, trim away excess fabric after stitching.

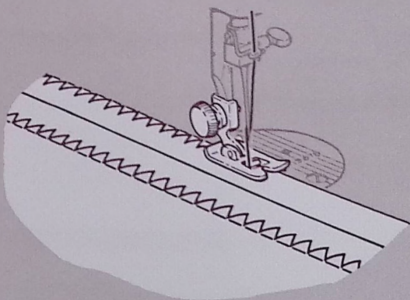


Flat-Felled Seams

Seam Finishes



Trimming Seam Edges



Overedged Seam Finish

DARTS

Darts can be made in the usual way on your sewing machine. That is, you begin stitching at the wide end of the dart, stitch to the point, and then fasten the two thread ends.

Regular Darts

- Stitch Width: 0
 - Stitch Length: About 12 or to suit fabric
-

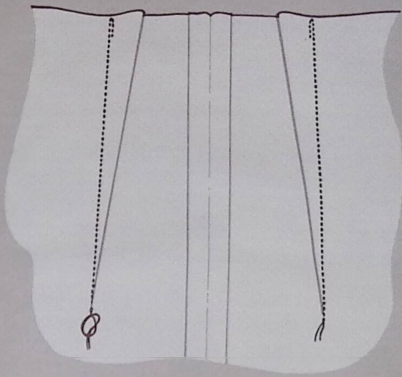
1. Stitch from the seam edge, tapering gradually to the point.
2. Stitch beyond the fabric to form a thread chain $1/2$ to $3/4$ inch long.
3. Tie the thread ends into a single knot close to the stitching.

Darts in Interfacing

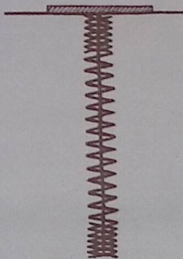
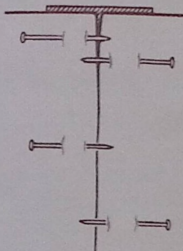
- Stitch Width: 4
 - Stitch Length: About 20 or to suit fabric
-

With zig-zag stitching, darts in interfacings can be shaped without bulk.

1. Cut out the dart allowance on the stitching line.
2. Bring raw edges together and pin or baste over a muslin stay.
3. Stitch, backstitching at both ends.



Regular Dart



Steps in Making a Dart in Interfacing

BUTTONHOLES

- Stitch Width: 2 and 4
 - Stitch Length: Above 30
-

Make a test buttonhole on a sample of your fabric so you can adjust stitch length to produce a closely spaced, freely-feeding zig-zag stitch. Be sure to duplicate the thickness of the garment and include interfacing if appropriate.

NOTE: For best results, use the special purpose foot which is available at your local Singer Sewing Center (see page 62).

Stitch Width Settings

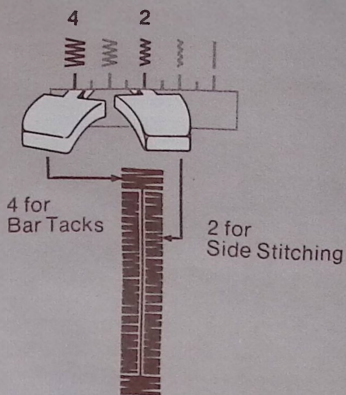
You will use two stitch width settings: for side stitching, stitch width 2, and for bar tacks (closings at ends of buttonhole), stitch width 4.

Buttonhole Length

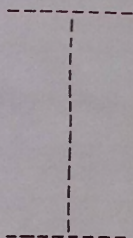
The length of the buttonhole depends on the diameter and thickness of the button. To find the correct length:

1. Cut a small slit in a scrap of fabric and gradually enlarge it until the button slips through easily.
2. Add approximately 1/8 inch at each end for bar tacks, and mark the fabric as shown.

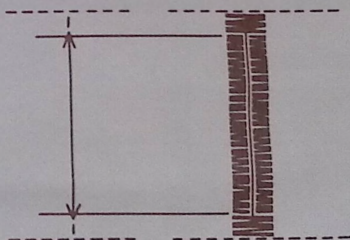
This bar-tack measurement is approximate; on some buttonholes, you may need to increase it or decrease it to arrive at pleasing proportions.



Stitch Width Settings



Marking Lines



**Length of
Cutting Space**

**Bar Tacks and
Side Stitching**

Procedure

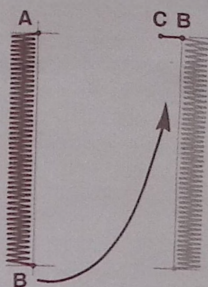
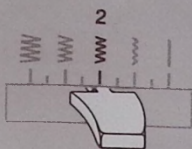
Place work under the presser foot, aligning center marking of buttonhole with the needle.

Side stitching

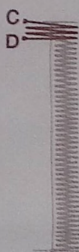
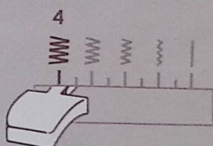
Set stitch width selector at **2**. Position the needle in the fabric at point **A**. Lower the presser foot and stitch down left side to end of buttonhole marking, stopping at point **B**. *Leave needle in fabric.* Raise presser foot and pivot work on needle. Lower the foot and take one stitch at same stitch width setting bringing needle to point **C**. *Leave needle in fabric.*

Bar tack

With needle in fabric, raise presser foot and set stitch width selector at **4**. Lower presser foot and take approximately 6 stitches ending at point **D**. *Leave needle in fabric.*



Side Stitching



Bar Tack

Side stitching

With needle in fabric, raise presser foot and reset stitch width selector to **2**. Lower presser foot and stitch, stopping at point **E**. *Leave needle in fabric.*

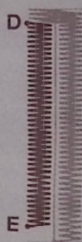
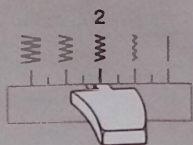
Final bar tack

With needle in fabric, raise presser foot and set stitch width selector at **4**. Lower presser foot and take approximately 6 stitches ending at point **F**. *Leave needle in fabric.*

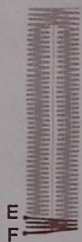
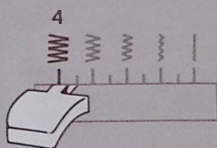
Fastening stitch

With needle in fabric, raise presser foot and set stitch width selector at **0**. Lower the presser foot and take approximately 3 stitches.

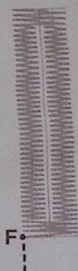
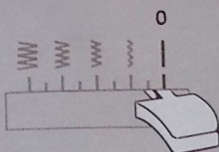
Remove work, draw threads to underside, fasten and trim. Cut opening for button with sharp scissors.



Side Stitching



Final Bar Tack



Fastening Stitch

keeping up appearances

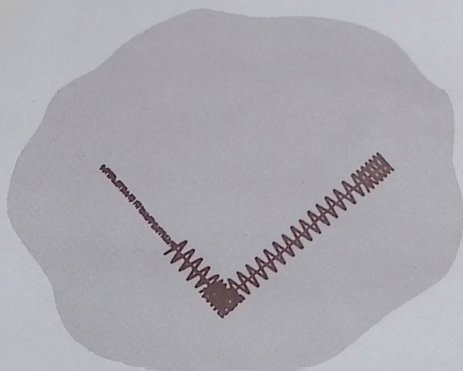
MENDING

The zig-zag stitch is just as useful for mending as it is for creative sewing. It forms a firm, flexible bond for repairing tears, replacing elastic and for making bar tacks to repair lingerie and to reinforce points of strain.

Mending a Tear

- Stitch Width: 2 to 4
 - Stitch Length: About 20
-

1. Trim ragged edges.
2. Place underlay on the wrong side of tear for reinforcement. (It is best not to baste or pin the underlay, since you will be bringing the edges together in the next step.)
3. Stitch on the right side, bringing the edges of the tear together. Shorten stitch length at ends and corners to give extra strength. Trim underlay.



Mending a Tear

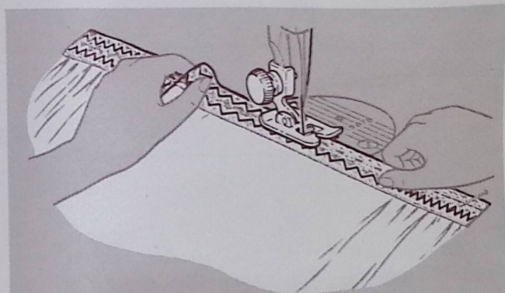
Replacing Elastic

When replacing elastic, use the same settings as for "Mending a Tear."

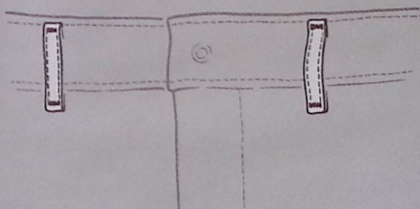
1. Fit elastic for desired snugness at waistline, allowing one inch for joining. Lap the ends and join with zig-zag stitching.
2. Divide elastic band and garment waistline into quarters. Lap elastic over fabric and pin the two together at these intervals. Place pins at right angles to stitching line.
3. Take a few stitches to anchor elastic to fabric, then hold the elastic taut as you stitch so that it will remain stretchable after stitching is completed.

Bar Tacks

Bar tacks, to repair lingerie and attach belt loops, are made with the zig-zag stitch at a closed stitch length.



Replacing Elastic



Bar-Tacked Belt Loops

BLANKET BINDING

Often you can make an old blanket look almost new by replacing the binding.

- Stitch Width: 4
 - Stitch Length: 15 to 20
-

1. Remove worn binding and baste new binding in place.
2. Reduce pressure on fabric by turning pressure thumb screw counterclockwise and increase stitch length, if necessary, so that blanket feeds freely.
3. Stitch, and remove basting.

DARNING

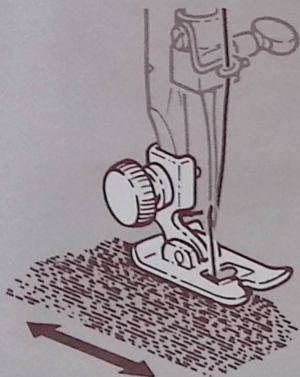
Worn or torn spots on children's clothes and household linens can be darned effortlessly and quickly with little practice.

- Stitch Width: 0
 - Stitch Length: 10 to 15
 - Pressure: Very light
-

1. If area to be darned is open, baste an underlay in place.
2. Place area to be darned under presser foot; lower presser foot and start stitching, alternately drawing fabric toward you and pulling it *gently* away from you.
3. Continue this back and forth motion until you fill the area with parallel lines of stitching. For additional strength, cover area with crosswise lines of stitching.



Blanket Binding



Darning

6. Caring for Your Machine

cleaning and lubricating

Your machine will serve you perfectly for many years if you keep it clean and lubricated. How often you will need to clean and lubricate the machine will depend on how often you use it.

CAUTION: *Before cleaning and lubricating the machine, disconnect the power-line plug from electrical supply.*

EVERY WEEK OR SO...

Remove lint or fluff from exposed parts. With a soft cloth, clean:

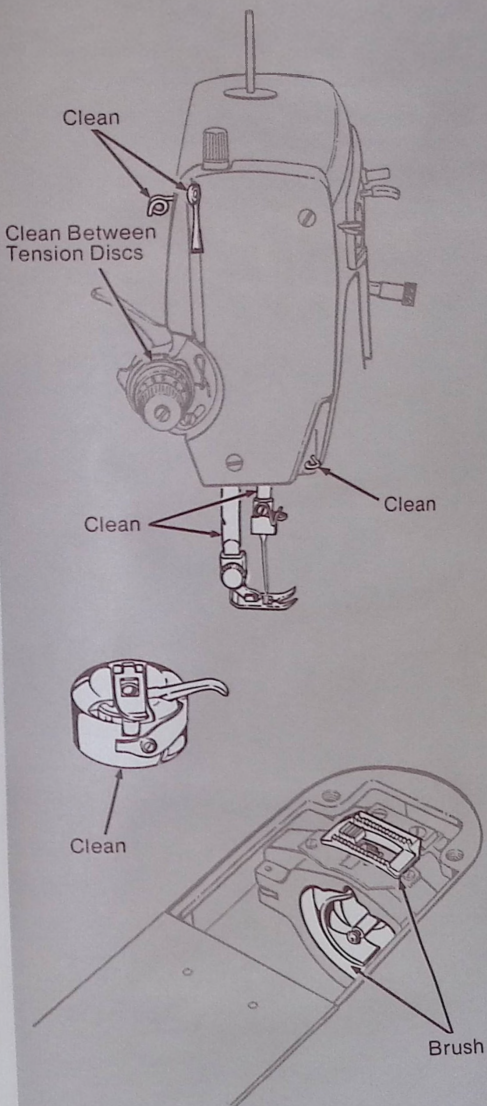
- Tension discs, presser bar and needle bar
- Take-up lever and thread guides
- Bobbin case, needle plate and slide plate
- Machine surface (If necessary, dampen the cloth and use a mild soap)

Remove needle plate by removing screws fastening it to machine bed and remove shuttle as instructed on page 54.

Using a brush, clean:

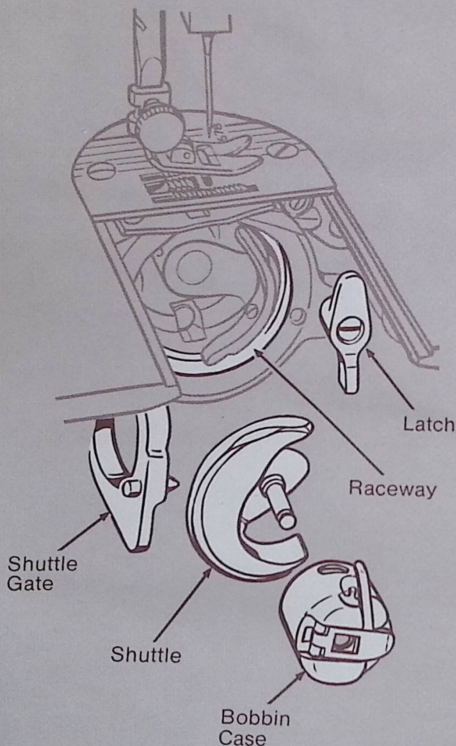
- Feed
- Shuttle area

After cleaning, apply a drop of SINGER* oil at points indicated on pages 55, 56, and 57.



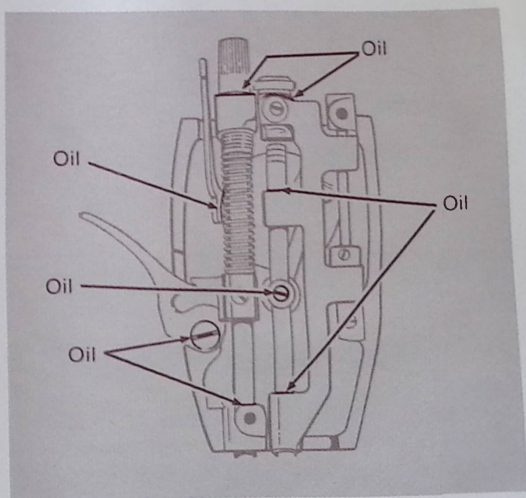
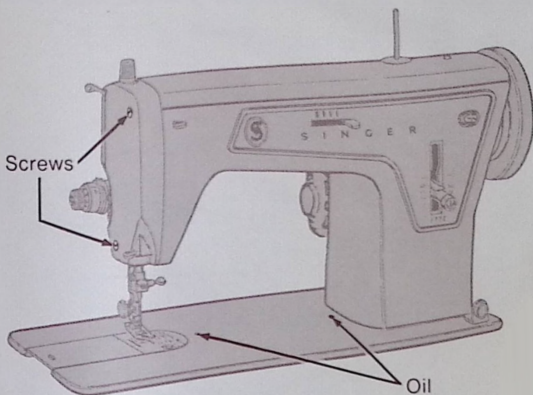
Removing and Replacing Shuttle

1. Raise take-up lever to its highest position.
2. Open slide plate, remove needle plate (see page 52), and remove bobbin case.
3. Push latch down, swing shuttle gate open, and remove shuttle from raceway.
4. Clean shuttle and raceway. Apply a drop of oil to raceway.
5. Replace shuttle in raceway and close and lock gate. Replace bobbin case and needle plate; close slide plate.



Cleaning and Lubricating Behind Face Plate

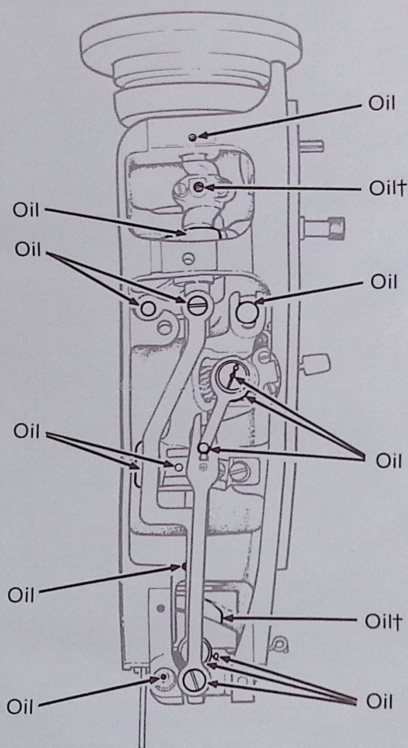
1. Remove the two screws from the face plate.
2. Using a brush, clean out lint and fluff which may have accumulated. Apply one drop of oil to all points indicated.
3. Replace face plate and sew a few lines of stitching on a scrap of material to remove excess oil.



EVERY FEW WEEKS...

Lubricate Top and Bottom of Machine

- Remove two screws from top cover and lift cover from machine.
- Apply a drop of oil to points indicated (three drops to points indicated by †).
- Apply a small amount of SINGER* gear lubricant to gears. *Never apply oil to gears.*
- Replace top cover.



Lubricating Top of Machine

adjusting motor belt tension

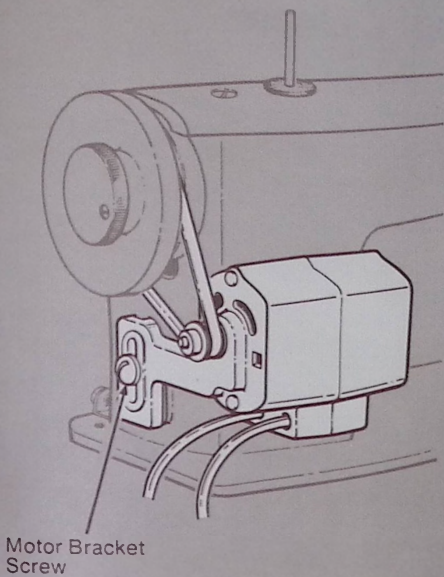
Tension on the motor belt should be just sufficient to keep the belt from slipping. If the motor belt needs adjustment:

- Loosen motor bracket screw a full turn.
- **To increase belt tension**, lower the motor bracket.
- **To decrease belt tension**, raise the motor bracket.
- Securely tighten motor bracket screw.

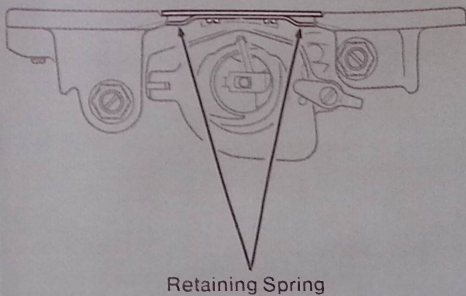
replacing the slide plate

You will not have any occasion to remove the slide plate. If it should accidentally become disengaged from the machine, it is easily replaced.

- Align back edge of slide plate with front end of slide way.
- Push slide plate back until retaining spring snaps into place.



Adjusting Motor Belt Tension



Replacing Slide Plate

removing machine from cabinet

IMPORTANT:

- Do not attempt to remove hinges from cabinet as this may result in damage to cabinet.
- Pull cabinet away from wall to avoid damage to wall or machine.
- Remove power-line plug from electrical supply.

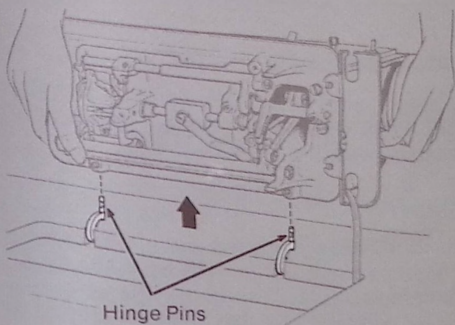
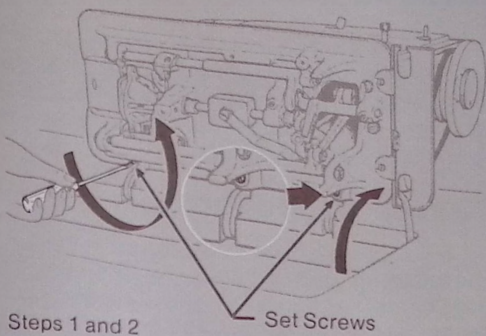
TO REMOVE MACHINE FROM CABINET

1. Tilt machine back until it rests on hinges.
2. Loosen set screws that hold machine on hinge pins by turning them counterclockwise.
3. Lift machine straight up and off pins. For ease of removal, stand behind cabinet when lifting machine.

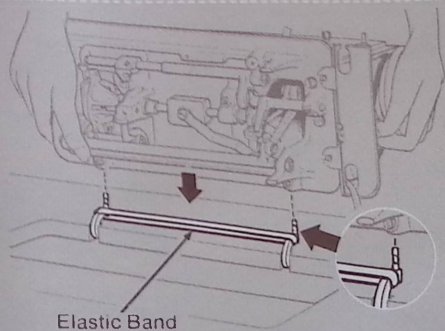
TO REPLACE MACHINE IN CABINET

Reverse the procedure used for removal of machine.

- Be sure set screws in machine are unscrewed far enough to clear openings for hinge pins.
- To keep hinge pins pointing up, slip an elastic rubber band around both pins, making sure the elastic band is over the shoulder of each hinge as illustrated.
- Be sure set screws are firmly tightened against hinge pins before lowering machine into cabinet.



Removing Machine from Cabinet



Replacing Machine in Cabinet

7. FASHION Aids

Fashion Aids increase the versatility of your sewing machine. The ones described below are just a few of the selection available at your local Singer Sewing Center.

SPECIAL PURPOSE FOOT—No. 161455

This light, flexible foot is designed for zig-zag satin stitching, buttonholing and applique. The raised center section allows very closely spaced zig-zag stitches to feed smoothly and evenly. The small eyelets at the front of the foot hold filler cord when desired.

SEAM GUIDE—No. 161172

The seam guide helps keep seam width uniform when extra control is needed, especially on unusually wide or narrow seams.

ZIPPER FOOT—No. 161127

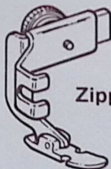
This foot makes it easy to place stitching close to a raised edge. Thus, it is useful for corded seams and zipper insertions. The zipper foot can be adjusted to either the left or right side of the needle. The hinged foot easily rides over pins, heavy layers of fabric, or across seams.



Special Purpose Foot



Seam Guide



Zipper Foot

Index

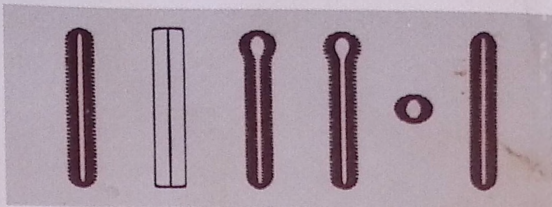
Adjusting Motor Belt Tension.....	58
Blanket Binding.....	50
Bobbin Case.....	10,14
Removing.....	10
Replacing.....	14
Threading.....	14
Bobbin Winding.....	10,11
Buttonholes.....	42
Caring for Your Machine.....	52
Changing the Needle.....	8
Choosing Needle and Thread.....	8
Cleaning and Lubricating.....	52
Curved Seams.....	30
Darning.....	50
Darts.....	40
In Interfacing.....	40
Regular.....	40
Ending a Seam.....	30
Fabric, Thread and Needle Table.....	9
<i>Fashion Aids</i>	62
Guiding and Supporting Fabric.....	28
Keeping Seams Straight.....	28
Mending.....	48
Bar Tacks.....	49
Mending a Tear.....	48
Replacing Elastic.....	49
Needle Thread.....	16
Operating Machine and Controller.....	6
Pin Basting.....	26
Presser-Foot Pressure.....	22,34
Principal Parts.....	4
Raising the Bobbin Thread.....	18
Removing Bobbin Case.....	10
Removing Machine from Cabinet.....	60
Removing and Replacing Shuttle.....	54
Replacing Bobbin Case.....	14
Replacing Slide Plate.....	58
Reverse Stitching.....	22
Seams.....	26,30,36
Curved.....	30
Flat-Felled.....	38
In Knit Fabrics.....	36
Lingerie.....	36
Seam Finishes.....	38
Straight.....	26

Index

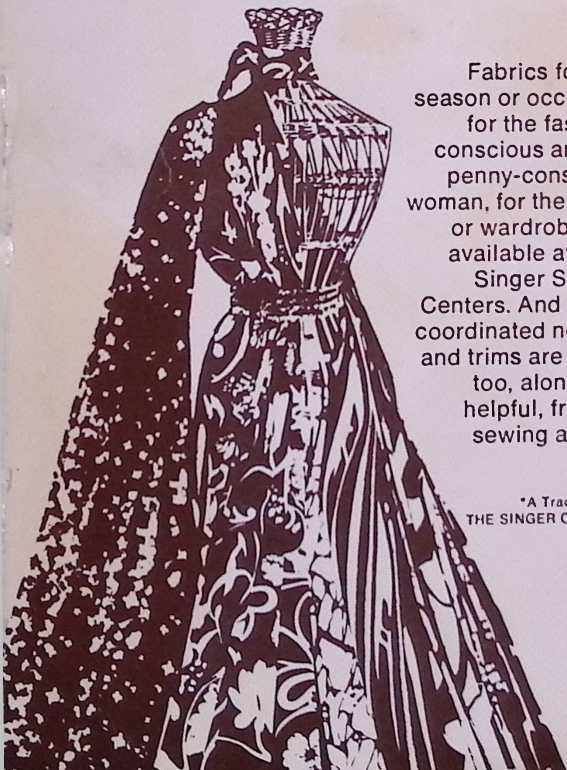
Sewing a Seam	26
Starting a Seam	26
Stitch Length Selector	22
Straight Stitching	20
Thread Tension	24
Bobbin Thread	24
Needle Thread	24, 34
Threading Bobbin Case	14
Threading the Machine	10
Zig-Zag Stitching	32
Stitch Length	32
Stitch Width	32
Thread Tension	34

Let **SINGER** help you enjoy sewing...

with products that make sewing easy!



The *Professional** buttonholer by SINGER enables you to sew buttonholes in five different styles plus eyelets. You choose the style and length—even adjust the stitch width and cutting space—to sew perfect buttonholes every time.



Fabrics for any season or occasion, for the fashion-conscious and the penny-conscious woman, for the home or wardrobe, are available at most Singer Sewing Centers. And color-coordinated notions and trims are there, too, along with helpful, friendly sewing advice.

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